

Figure 1

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BLAST search
against
SwissProt



Identify gene family

ClustalW comparison
with SwissProt top hit



Demonstrates global alignment

BLAST against non-
redundant GPCR db



Demonstrates GPCR sub-family

ClustalW Alignment of PFI-019 with P2Y purinoceptor 1 (P2Y1)

5	PFI-019	MNEPLDYLA-NASDFPDYA---AAFGN-----CTDENIPLKMHYLPVIYGI
	P2Y1	MTEVLWPAVPNGTDA AFLAGPGSSWGNSTVASTAAVSSSFKCALTKTGQFYFLPAVYIL
		. * .*.:* . * :.:** *: : :.:**.* : :
10	PFI-019	IFLVGFPGNAVVISYIFKMRPWKSSTIIMLN LACTDLLYLTSLPFLIHYYASGENWIFG
	P2Y1	VFIIGFLGNSVAIWMFVFHMKPWSGISVYMFNLALADFLYVLTLPALIFYFYNKTDWIFG
		:.:** **:.* :.:*:**.. : :*:** :*:** :** **.* . :****
15	PFI-019	DFMCKFIRFSFHFNL YSSILFLTCSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISL
	P2Y1	DAMCKLQRFIFHVNLYGSILFLTCSIAHRYSGVVYPLKSLGRLKKKNAICISVLVWLIVV
		* **.: ** **.***.***.*.* :.:*:. . . *.: * : ..:***: :
20	PFI-019	VAVIPMTFLITSTNRTNRS-ACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTI
	P2Y1	VAISPILFYSGTGVRKNKTITCYDTSDEYLRSYFIYSMCTTVAMFCVPLVLILGCYGLI
		.: *: * : *.*: : * * **.: *: *. : *. : **:*.: ** *
25	PFI-019	IHTLTHGLQTDSC LKQKARRLTILLLLAFYVCFLPFHILRVIRIESRLLSIS--CSIEN
	P2Y1	VRALIYKDLDNSPLRRKSIYLVIIVLT VFAVS YIPFHVMTMNLRARLDFQTPAMCAFND
		:.:* : :* **.:* *.*:.* * *.:***:..:..:.* : *.::
30	PFI-019	QIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVR--CKVSGNLEQ-AKKISYS
	P2Y1	RVYATYQVTRGLASLNSCVDPILYFLAGDTFRRRLSRATRKASRRSEANLQSKSEDMTLN
		:.: :* *:* **.:* : :**.:..*.: : ..* : ..**.: :.: : .
35	PFI-019	NNP-----
	P2Y1	ILPEFKQNGDTSL
		*

Figure 3: Stimulation of PFI-019 by 2-chloro-ATP

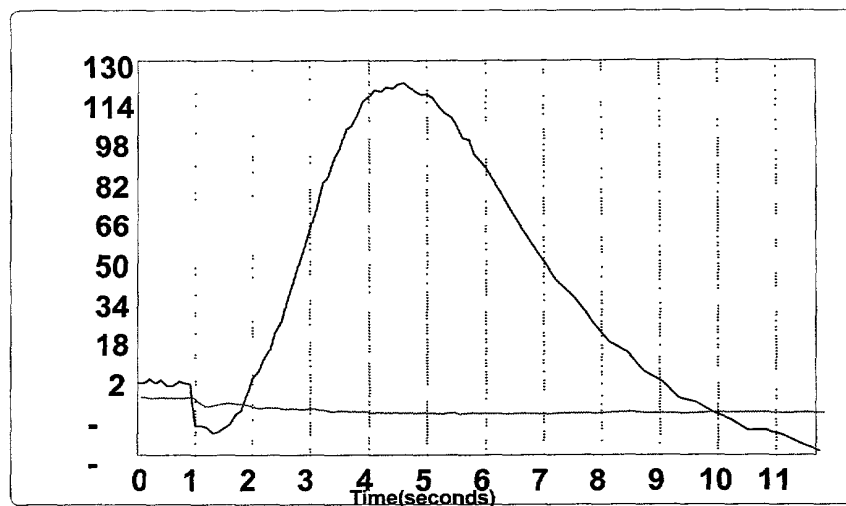


Figure 4: Stimulation of PFI-019 by 2-methyl-thio-ATP

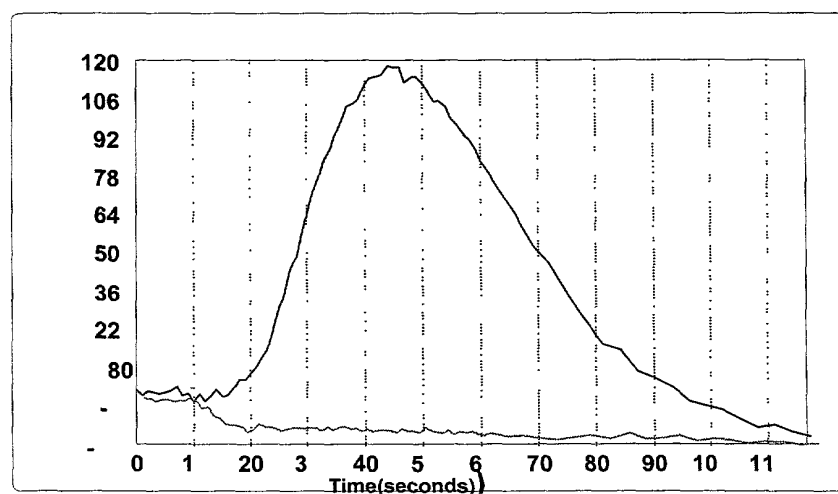


Figure 5: Stimulation of PFI-019 by 2-methyl-thio-ADP

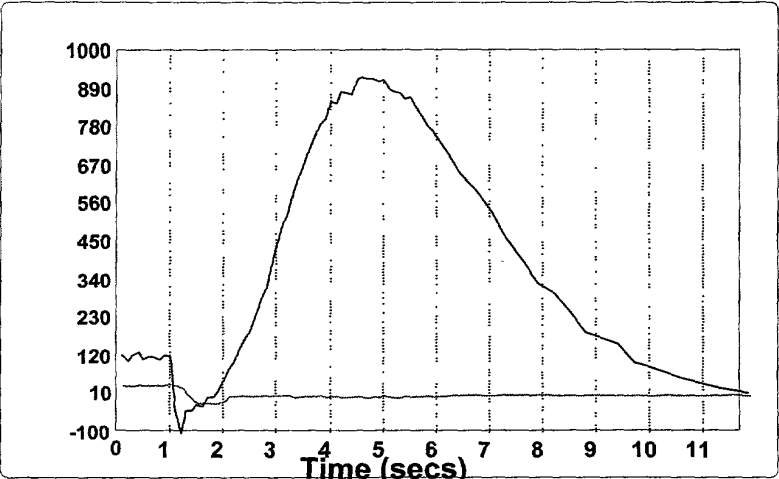


Figure 6: Stimulation of PFI-019 by UTP

